

Express Mail Label No.: EJ770258776US
Date of Deposit: February 7, 2001

PATENT
Attorney Docket No: 17810-513 (SCI-13)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ART UNIT: 1632
APPLICANTS: Rosemary A. Fricker
SERIAL NO: 09/693,043
FILING DATE: October 20, 2000
FOR : METHODS FOR INDUCING IN VIVO PROLIFERATION AND
MIGRATION OF TRANSPLANTED PROGENITOR CELLS IN THE
BRAIN

February 7, 2001
Boston, Massachusetts

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97, and 1.98, Applicant hereby makes of record the attached documents listed below and on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application. The order of presentation of the references should not be construed as an indication of the importance of the references.

U.S. Patents:

| | | |
|-----------|----------|------------------------|
| 4,352,883 | 10/5/82 | Lim |
| 4,353,888 | 10/12/82 | Sefton |
| 4,470,461 | 9/11/84 | Stapp |
| 4,968,733 | 11/6/90 | Muller and Wechs |
| 4,976,859 | 12/11/90 | Wechs |
| 5,082,670 | 1/21/92 | Gage, et al. |
| 5,084,350 | 1/28/92 | Chang and Wong |
| 5,122,464 | 6/16/92 | Wilson and Bebbington |
| 5,158,881 | 10/27/92 | Aebischer and Wahlberg |
| 5,284,761 | 2/8/94 | Aebischer and Wahlberg |

APPLICANTS: Rosemary A. Fricker
U.S.S.N.: 09/693,043

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|-----------|---------|----------------|
| 5,618,531 | 4/8/97 | Cherksey |
| 5,750,376 | 5/12/98 | Weiss, et al. |
| 5,753,506 | 5/19/98 | Johe |
| 5,800,828 | 9/1/98 | Dionne, et al. |

Foreign Patents:

| | | | |
|----|--------------|---|----------|
| EP | 0 338 841 B1 | Celltech Limited | 10/25/89 |
| WO | 96/31242 | Albert Einstein College of Medicine of Yeshiva University | 10/10/96 |
| WO | 92/19195 | Brown University Research Foundation | 11/12/92 |
| WO | 93/01275 | Weiss and Reynolds | 1/21/93 |
| WO | 94/09119 | Neurospheres Ltd. | 4/28/94 |
| WO | 94/10292 | Neurospheres Ltd. | 5/11/94 |
| WO | 94/16718 | Neurospheres Ltd. | 8/4/94 |
| WO | 95/00632 | Amgen, Inc. | 1/5/95 |
| WO | 95/05452 | Cytotherapeutics, Inc. | 2/23/95 |
| WO | 96/02646 | Cytotherapeutics, Inc. | 2/1/96 |

Other Documents:

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| Cattaneo, et al., Molec. Brain Res., 42:161-66 (1996). |
| Lois and Alvarez-Buylla, Science, 264:1145-48 (1994). |
| Craig, et al., J. Neurosci., 16:2649-58 (1996). |
| Luskin, Neuron, 11:173-89 (1993). |
| Kuhn, et al., J. Neurosci., 17:5820-29 (1997). |
| Ahmed, et al., J. Neurosci., 15:5765-78 (1995). |
| Potten and Loeffler, Development, 110:1001-20 (1990). |
| Fricker, et al., J. Neurosci., 19(14): 5990-6005 (1999). |

- ☐ This Information Disclosure Statement is being been filed:
within three months of the filing date of the National Application;
- ☐ within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R.
§1.491, in an International Application; or

APPLICANTS: Rosemary A. Fricker
U.S.S.N.: 09/693,043

☒ before the mailing date of a first Office Action on the merits in the above-identified case.

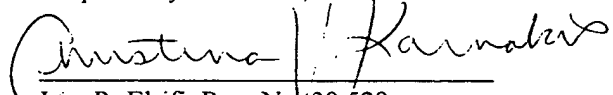
Accordingly, no fee or certification is required. 37 C.F.R. §1.97

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicants, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested. Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311 (Reference No. 17810-513 (SCI-13)).

Respectfully submitted,



Ivor R. Elrifi, Reg. No. 39,529
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Date of Deposit: February 7, 2001

Page 1 of 2

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PTO/SB (12-97)

Approved for use through 9/30/00. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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|---|-------------------------------|---------------------|
| Modified Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | Application Number | 09/693,043 |
| | Filing Date | October 20, 2000 |
| | First Named Inventor | Rosemary A. Fricker |
| | Group Art Unit | 1632 |
| | Examiner Name | |
| | Attorney Docket Number | 17810-513- (SCI-13) |

| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|----------|--------------------------|------------|-------------------------------------|-------|-----------|----------------------------|
| Exam Initials | Cite No. | U.S. Patent Document No. | Issue Date | Name of Patentee(s) or Applicant(s) | Class | Sub Class | Filing Date If Appropriate |
| | A1 | 4,352,883 | 10/5/82 | Lim | | | |
| | A2 | 4,353,888 | 10/12/82 | Sefton | | | |
| | A3 | 4,470,461 | 9/11/84 | Stapp | | | |
| | A4 | 4,968,733 | 11/6/90 | Muller and Wechs | | | |
| | A5 | 4,976,859 | 12/11/90 | Wechs | | | |
| | A6 | 5,082,670 | 1/21/92 | Gage, et al. | | | |
| | A7 | 5,084,350 | 1/28/92 | Chang and Wong | | | |
| | A8 | 5,122,464 | 6/16/92 | Wilson and Bebbington | | | |
| | A9 | 5,158,881 | 10/27/92 | Aebischer and Wahlberg | | | |
| | A10 | 5,284,761 | 2/8/94 | Aebischer and Wahlberg | | | |
| | A11 | 5,618,531 | 4/8/97 | Cherksey | | | |
| | A12 | 5,750,376 | 5/12/98 | Weiss, et al. | | | |
| | A13 | 5,753,506 | 5/19/98 | Johe | | | |
| | A14 | 5,800,828 | 9/1/98 | Dionne, et al. | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|----------|---------------------------------------|---|---------------------|--------------------|--|
| Exam Initials | Cite No. | Foreign Patent Document Office Number | Name of Patentee(s) or Applicant(s) | Date of Publication | Translation Yes No | |
| | B1 | EP 0 338 841 B1 | Celltech Limited | 10/25/89 | | |
| | B2 | WO 96/31242 | Albert Einstein College of Medicine of Yeshiva University | 10/10/96 | | |
| | B3 | WO 92/19195 | University Research Foundation | 11/12/92 | | |
| | B4 | WO 93/01275 | Weiss and Reynolds | 1/21/93 | | |
| | B5 | WO 94/09119 | Neurospheres Ltd. | 4/28/94 | | |
| | B6 | WO 94/10292 | Neurospheres Ltd. | 5/11/94 | | |
| | B7 | WO 94/16718 | Neurospheres Ltd. | 8/4/94 | | |
| | B8 | WO 95/00632 | Amgen, Inc. | 1/5/95 | | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-------------|--|----------|-------------------------------------|------------------------|-----------------------|
| Exam Initials | Cite No. | Foreign Patent Document Office Number | | Name of Patentee(s) or Applicant(s) | Date of Publication | Translation Yes No |
| | B9 | WO | 95/05452 | Cytotherapeutics, Inc. | 2/23/95 | |
| | B10 | WO | 96/02646 | Cytotherapeutics, Inc. | 2/1/96 | |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | |
|---|-------------|--|
| Exam Initials | Cite No. | Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc. |
| | C1 | Cattaneo, et al., Molec. Brain Res., 42:161-66 (1996). |
| | C2 | Lois and Alvarez-Buylla, Science, 264:1145-48 (1994). |
| | C3 | Craig, et al., J. Neurosci., 16:2649-58 (1996). |
| | C4 | Luskin, Neuron, 11:173-89 (1993). |
| | C5 | Kuhn, et al., J. Neurosci., 17:5820-29 (1997). |
| | C6 | Ahmed, et al., J. Neurosci., 15:5765-78 (1995). |
| | C7 | Potten and Loeffler, Development, 110:1001-20 (1990). |
| | C8 | Fricker, et al., J. Neurosci., 19(14): 5990-6005 (1999). |

* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. _____, filed _____, and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Bjorklund, *et al.*

SERIAL NUMBER: 09/693,043

EXAMINER: Not Yet Assigned

FILING DATE: October 20, 2000

ART UNIT: 1643

FOR: METHODS FOR INDUCING *IN VIVO* PROLIFERATION AND MIGRATION OF
TRANSPLANTED PROGENITOR CELLS IN THE BRAIN

Box IDS

Assistant Commissioner for Patents

Washington, D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed below and on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application, copies of which are submitted herewith. The order of presentation of the references should not be construed as an indication of the importance of the references.

U.S. Patent Documents:

5,968,829

Carpenter, Melissa

1999-10-19

Foreign Patent Documents:

WO 99/06060

University of California

1999-02-11

Other Prior Art – Non Patent Literature Documents:

International Search Report, issued 2001-05-31

Fricker-Gates, Rosemary, *et al.*, October 2000. "EGF infusion stimulates the proliferation and migration of embryonic progenitor cells transplanted in the adult rat striatum." *Exp. Neurology*, vol. 165, no. 2, pages 237-247.

Winkler, *et al.*, 1997. "Effects of intraventricular EGF-delivery on transplants of EGF-responsive neural progenitor cells." *Soc. for Neuroscience Abstracts*, vol. 23, no. 1-2, page 593.

This Information Disclosure Statement is being been filed:



within three months of the filing date of the National Application;

APPLICANTS: Bjorklund, *et al.*
U.S.S.N.: 09/693,043

- ☐ within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R. §1.491, in an International Application; or
- ☒ within three months of the mailing date of the International Search Report;
- ☐ before the mailing date of a first Office Action on the merits in the above-identified case.

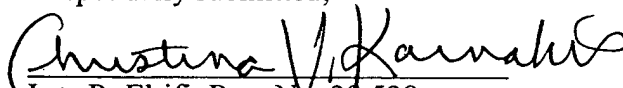
Accordingly, no fee or certification is required. 37 C.F.R. §1.97

A copy of each of the above-identified information is enclosed unless otherwise indicated on the attached Form PTO-1449 (modified). It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Supplemental Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

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Respectfully submitted,



Ivor R. Elrifi, Reg. No. 39,529

Christina V. Karnakis, Reg. No. 45,899

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Dated: July 24, 2001

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| Modified Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | Application Number | 09/693,043 |
| | Filing Date | 10/20/00 |
| | First Named Inventor | Bjorklund |
| | Group Art Unit | 1643 |
| | Examiner Name | Not Yet Assigned |
| | Attorney Docket Number | 17810-513 (SCI-13) |

| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|----------|--------------------------|------------|-------------------------------------|-------|-----------|----------------------------|
| Exam Initials | Cite No. | U.S. Patent Document No. | Issue Date | Name of Patentee(s) or Applicant(s) | Class | Sub Class | Filing Date If Appropriate |
| | A15 | US 5,968,829 | 10/19/99 | Carpenter, Melissa | | | 09/05/1997 |

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|----------|--------------------------------|----------|--------------------------|---------------------|--------------------|--|
| Exam Initials | Cite No. | Foreign Patent Document Office | Number | Name of Applicant(s) | Date of Publication | Translation Yes No | |
| | B11 | WO | 99/06060 | University of California | 02/11/1999 | | |
| | | | | | | | |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | |
|---|----------|--|
| Exam Initials | Cite No. | Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc. |
| | C9 | International Search Report, issued 05/30/01 |
| | C10 | Fricke-Gates, Rosemary, <i>et al.</i> , October 2000. "EGF infusion stimulates the proliferation and migration of embryonic progenitor cells transplanted in the adult rat striatum." Exp. Neurology, vol. 165, no. 2, pgs. 237-247. |
| | C11 | Winkler, <i>et al.</i> , 1997. "Effects of intraventricular EGF-delivery on transplants of EGF-responsive neural progenitor cells." Soc. for Neuroscience Abstracts, vol. 23, no. 1-2, page 593. |
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* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. _____, filed _____, and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

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|---------------------------|--|------------------------|--|
| Examiner Signature | | Date Considered | |
|---------------------------|--|------------------------|--|

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